



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,751	06/22/2001	Steven S. Kantner	55980USA1B.004	7737

7590 03/27/2003

Attention: Robert W. Sprague  
Office of Intellectual Property Counsel  
3M Innovative Properties Company  
P.O. Box 33427  
St. Paul, MN 55133-3427

EXAMINER

YU, GINA C

ART UNIT	PAPER NUMBER
----------	--------------

1617

DATE MAILED: 03/27/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/887,751

Applicant(s)

KANTNER ET AL.

Examin r

Gina C. Yu

Art-Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1 and 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 6, 2003 has been entered. Claims 1-16 are pending.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-8 and 10-16 are rejected as being unpatentable over Bolich, Jr et al. (US 5662892) ("Bolich") in view of Chen et al. (US 6299864 B1) ("Chen").

Bolich teaches hair styling/conditioning compositions containing the copolymers of C1-C18 alkyl esters of acrylic or methacrylic acid in aqueous carrier. See abstract. The monomers of instant claim 1(a)(i) such as n-butyl (meth)acrylate in the amount of 10-95 wt %; and the monomers of instant claim 1(a)(ii) such as dimethyladamentyl (meth)acrylate or isobornyl (meth)acrylate are used in the amount of 10-50 wt %. See col. 4, line 47 – col. 5, line 30. The additives of instant claim 12, including thickeners, surfactants and silicone and oil conditioning agents, are disclosed in col. 7, line 55 - col. 21, line 56. The reference further teaches that the linear copolymers form a film having a Tg of at least about 30 °C so that they are not unduly sticky or tacky to the touch. See

Art Unit: 1617

---

col. 3, line 64 – col. 4, line 4. The aqueous carriers of instant claims 14-15, including water, ethanol and propanol are discussed in col. 7, lines 17 – 59. The reference further teaches the solvents of instant claim 16, such as C10-C16 hydrocarbon, silicone derivatives, and ethers, isododecane being most preferred. See col. 6, line 28 – col. 7, line 25.

The reference teaches that the invention is applicable in cream or lotion formulation. See col. 7, lines 56 – 59. See instant claim 9.

As for instant claims 6 –8, examiner takes the position that, since Bolich discloses the composition having the same limitation of the instant claims, the undisclosed measurement of the tack or flexibility test value of the film formed by the composition and the average particle size of the copolymer, are characteristics that naturally flow from the prior art invention.

2. Claims 1-5, 9, 11, and 12 are rejected as being unpatentable over Mougin (US 6126929) in view of Bolich.

Mougin teaches cosmetic or dermatological compositions comprising a film-forming polymer particles. See abstract. The reference teaches that particularly preferred polymers are crosslinked copolymers of at least one linear, cyclic or brached C1-C89 alkyl methacrylate of acrylic acid and/or of methacrylic acid. See col. 4, lines 54-67. See instant claims 4 and 5. Monomers such as t-butyl methacrylate, cyclohexyl methacrylate, and isobornyl acrylate are taught. See instant claims 2 and 3The weight ratio of the polymers in the copolymer composition comprising a hydrophilic monomer

---

Art Unit: 1617

such as acrylic acid is generally taught in Example 2. See instant claims 4 and 5. The application of the film-forming composition in mascara composition is also taught in Examples 3-5 and 7-13. See instant claim 12. Example 6 teaches that the invention is also applicable in hair styling composition. The Tg of the polymer is said to be less than 25°C. See abstract. See instant claim 11.

While Mougins generally teaches the condition of the film-forming copolymers as recited in the instant claims, the reference fails to teach specifically combining the polymers in instant claim 1(a)(i) and (ii).

Bolich, discussed above, teaches Bolich teaches hair styling/conditioning compositions containing the copolymers which meet the limitation of instant claim 1(a). The reference further teaches that the linear copolymers form a film having a Tg of at least about 30 °C so that they are not unduly sticky or tacky to the touch. See col. 3, line 64 – col. 4, line 4.

Given the general teaching of using film-forming copolymers for mascara or hair styling compositions in Mougins, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have looked to the prior arts such as Bolich for specific suitable copolymers. The motivation to use the Bolich copolymers would have been obvious to the skilled artisan because he would have expected to successfully produce a film-forming cosmetic composition such as mascara that are not unduly sticky or tacky.

***Response to Arguments***

Applicant's arguments with respect to claims 1-16 have been considered but are unpersuasive.

Applicants argue that the solution of the copolymer and the hydrocarbon solvent used in the Bolich invention do not read on the instant claims. Examiner respectfully disagrees. Contrary to applicants' assertion, the instant claims are not necessarily limited a composition comprising a copolymer dispersed in a carrier, solvent, or vehicle. Instead, the recited invention is an emulsion or dispersion composition comprising the recited copolymers and the carrier, solvent, or vehicle. The claimed invention can be any mixture in the form of either an emulsion or dispersion containing the recited copolymers and the carrier, solvent, or vehicle.

Applicants' argument that the hydrocarbon solvents used in the Bolich invention does not meet the instant invention is also unpersuasive. The reference teaches that isododecane is preferably used. See col. 6, lines 61 – 64.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 703-308-3951.

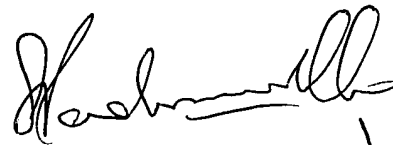
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 703-305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Art Unit: 1617

---

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Gina C. Yu  
Patent Examiner  
March 21, 2003



SREENI PADMANABHAN  
PRIMARY EXAMINER

3/24/03